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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PHILPOTT, JUSTIN M

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,208

Applicant(s)

COX ET AL.

Examiner

Justin M. Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the rejection claims 16-18 under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement, see pages 7-8 of the Remarks filed February 14, 2005 in conjunction with the Affidavit filed under 37 C.F.R. 1.132 on February 14, 2005, have been fully considered and are persuasive. The rejection of claims 16-18 under 35 U.S.C. 112, first paragraph has been withdrawn. However, it is noted that the disclosure which applicant relies upon (i.e., RFC 2462) to enable applicant's claims, through its incorporation by reference in applicant's specification, is prior art. Thus, while the limitations of claims 16-18 may be enabled by prior art RFC 2462, and accordingly by applicant's specification through its incorporation by reference to RFC 2462, the claims may alternatively be clearly rejected in view of the prior art of RFC 2462. Accordingly, while claims 16-18 may meet the enablement requirement, the claims fail to recite patentable subject matter.

2. Applicant's arguments filed February 14, 2005 with respect to the prior art rejections of claims 1-16 have been fully considered but they are not persuasive.

First, applicant argues (page 9, paragraphs 1-3) that applicant's invention is directed only towards "communication links that do not already have a prefix" and that Alkhatib does not provide for "operation in the absence of an established globally routable network prefix". However, applicant's claims do not distinguish applicant's invention from Alkhatib in this manner. That is, in response to applicant's argument that the references fail to show certain

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features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "communication links that do not already have a prefix" and "operation in the absence of an established globally routable network prefix") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, applicant's argument is not persuasive.

Second, applicant argues (page 9, fourth paragraph to page 10, first paragraph) that Alkhatib does not teach determining whether a new address is needed as recited in applicant's claim 1. However, as discussed in the previous office action, and repeated herein, Alkhatib does in fact teach such a broad limitation. That is, Alkhatib teaches "choosing a new host number" (col. 3, line 35), "verifying the new chosen address is unique" (col. 3, line 38), and "[i]f a conflict is found, a new address is determined" (col. 3, line 40). Clearly, according to these passages, when a conflict is found, Alkhatib teaches that such an outcome determines a new address is needed. Thus, Alkhatib clearly teaches the broadly recited limitation in applicant's claim 1, and applicant's argument is accordingly not persuasive.

Third, applicant argues (page 10, second paragraph) that Alkhatib does not teach a router as claimed by applicant in claim 1. However, as discussed in the previous office action, and repeated herein, Alkhatib is *not* relied upon for this particular teaching. Rather, Schutte is relied upon for this teaching. Thus, applicant's argument that Alkhatib fails to teach such a claim limitation is moot. Further, as discussed in the previous office action, and repeated herein, the router limitations recited in claim 1 are clearly taught by Schutte.

Fourth, applicant argues with respect to claim 8 (page 11, paragraphs 1-2) that Alkhatib teaches decisions are made on a packet-by-packet basis and applicant's invention "decides whether to support an 'identified active communication link' as a whole, for all packets that might appear on that link, indefinitely". However, such a limitation is *not* recited in applicant's claim 8. Rather, claim 8 broadly recites "identifying whether the router needs to support the identified active communication link", without making any reference to the link "as a whole" or "for all packets" appearing on a link "indefinitely" which applicant has argued is lacking in the teaching of Alkhatib. Thus, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "decid[ing] whether to support an 'identified active communication link' as a whole, for all packets that might appear on that link, indefinitely") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, applicant's argument is not persuasive. Further, it is noted herein that it is well known in the art that a "communication link" is understood to mean "a means of communicating ... information ... between two devices or subsystems" ("The Authoritative Dictionary of IEEE Standards Terms, 7th Edition", IEEE 2000), and the limitations discussed above which are not recited in applicant's claims should not be read into the claims. Thus, for this additional reason, applicant's argument is not persuasive.

Fifth, applicant argues (page 11, third paragraph to page 12, second paragraph) that Schutte does not teach a particular limitation because the cited passage is in a claim of Schutte. However, the particular claim limitation in consideration has been canceled by applicant in

recognition of the fact that the limitation is not enabled by applicant's specification. Thus, this argument is moot since the limitation is no longer recited in any of applicant's claims.

Sixth, applicant argues (page 12, third paragraph to page 13, first paragraph) that the combination of Alkhatib and Schutte is not obvious since it incorporating the entire embodiment of Alkhatib with the entire embodiment of Schutte would result in a less efficient system. However, in response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). As discussed in the previous office action, and repeated herein, the combination of Alkhatib and Schutte advantageously teach the limitations of applicant's claims. Thus, applicant's argument is not persuasive.

Seventh, applicant argues (page 13, second and third paragraphs) that Alkhatib does not teach advertising as recited in applicant's claims 4 and 14. However, applicant's argument is not persuasive. First, before discussing the merits of applicant's argument, the record must be clarified to correct applicant's error in stating, "the Examiner states, 'In step 90, ...'" (page 3, paragraph 2, line 4). This quote is a passage by Alkhatib, and is *not* a statement made by the Examiner. Second, the above-mentioned passage of Alkhatib is *not* the passage Examiner has cited for providing the teaching of applicant's claims. On the contrary, Alkhatib specifically teaches determining whether the device needs to advertise a new address by disclosing that the device determines whether it has received enough responses, and if not, messaging to the other

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nodes to send their addresses (e.g., the loop of steps 90, 92, 94 in FIG. 3, see col. 5, line 50 – col. 12, line 63 and specifically, col. 10, lines 23-32). Thus, applicant's argument is not persuasive.

Eighth, applicant argues (page 13, fourth paragraph to page 14, first paragraph) that Alkhatib does not teach the particular advertising method discussed in the prior art of RFC 2462. However, the advertising method discussed in the prior art of RFC 2462 is not recited in applicant's claims. Thus, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the advertising method discussed in the prior art of RFC 2462) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, applicant's argument is moot.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,532,217 to Alkhatib et al. in view of U.S. Patent No. 6,178,455 to Schutte et al.

Regarding claims 1-3, 8 and 11-13, Alkhatib teaches a method comprising a router: identifying active communication links to provide identified active communication links (e.g., see col. 5, lines 15-49 and FIG. 2 regarding devices 72, 74 and 76 and communication links to

subnet 70); and automatically identifying whether the router needs a new address prefix for the identified active communication link (e.g., see col. 3, lines 27-41 wherein finding a conflict identifies a new address prefix is required).

Further, regarding claim 8, Alkhatib teaches automatically identifying whether the router needs to support the identified active communication link (e.g., see col. 4, lines 35-53 wherein the routing table determines whether the router is to support the link, or if packets should be forwarded to another router).

However, Alkhatib may not specifically disclose the router has at least two interfaces and connects multiple communication links to one another.

Schutte, like Alkhatib, also teaches a method of routing and, specifically, teaches a router (e.g., router 101, see FIGS. 1 and 2) has at least two interfaces (e.g., 124 coupled to a WAN and 120 coupled to a LAN) and connects multiple communication links to one another (e.g., see col. 7, lines 28-46). The teachings of Schutte provides increased efficiency for address assignment in a network (e.g., see col. 3, line 28 – col. 4, line 11). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the routing teachings of Schutte to the routing method of Alkhatib in order to provide increased efficiency for address assignment in a network (e.g., see col. 3, line 28 – col. 4, line 11).

Regarding claims 4 and 14, Alkhatib teaches automatically determining whether the router needs to advertise a new address prefix for use by link endpoints (e.g., step 94 in FIG. 3A; see also col. 5, line 50 – col. 12, line 63, and specifically col. 10, lines 23-32).

Regarding claims 5, 6, 9 and 10, Alkhatib teaches automatically monitoring the identified active communication link for prefix advertisements from another router and determining when

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the router has not received a prefix advertisement from another router for the same active communication link within a predetermined period of time, wherein the router then needs to support the identified active communication link (e.g., see col. 9, line 39 – col. 11, line 45).

Regarding claims 7 and 15, Alkhatib teaches automatically determining whether the router needs to advertise an address prefix for use by link endpoints by soliciting at least one router to advertise (e.g., see col. 5, lines 50-59).

Regarding claim 16, Schutte teaches an address prefix (e.g., net ID 605 in FIG. 9) serves as a component of addresses on a communication link to allow endpoints and routers (e.g., router 101) to generate new addresses for use on that communication link, wherein the router needs a new address prefix when no address prefix has been previously established for the identified active communication link (e.g., see col. 3, line 65 – col. 4, line 11; see col. 24, line 11 – col. 25, line 42). As discussed above, the teachings of Schutte provides increased efficiency for address assignment in a network (e.g., see col. 3, line 28 – col. 4, line 11). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the routing teachings of Schutte to the routing method of Alkhatib in order to provide increased efficiency for address assignment in a network (e.g., see col. 3, line 28 – col. 4, line 11).

5. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alkhatib in view of Schutte, further in view of applicant's admitted prior art (AAPA).

Regarding claims 17 and 18, Alkhatib in view of Schutte teach the method discussed above regarding claims 4 and 8, however, may not specifically disclose a router advertises a prefix on an identified active communication link by sending a message containing the prefix to

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nodes present on the communication link. However, applicant admits such a step is well known in the art (see applicant's specification, page 5, lines 29-32, wherein applicant states, "prior art routers often advertise their address prefixes on their supported links to facilitate stateless autoconfiguration by endpoints"). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to configure the router to advertise a prefix on the identified active communication link by sending a message containing the prefix to nodes present on the communication link, since applicant admits that such a step is well known in the art and further provides the advantage of facilitating stateless autoconfiguration by endpoints. Further, regarding claim 17, while AAPA may not specifically disclose sending the message to *all* nodes present, it is well known in the art of routing that sending a message to a plurality of nodes in a network may comprise sending the message to all nodes present in the network. Further, applicant is reminded that, as discussed above, applicant's specification does not disclose, and therefore is not enabling for, this limitation of sending the message to *all* nodes present. Thus, even if such a limitation were not obvious, applicant's specification is not enabling for this limitation in claim 17.

Further, regarding claim 18, Schutte teaches the router (e.g., router 101) supports the active link by facilitating packet-forwarding activities between the communication links via the router (e.g., see col. 22, line 52 – col. 23, line 21). As discussed above, the teachings of Schutte provides increased efficiency for address assignment in a network (e.g., see col. 3, line 28 – col. 4, line 11). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the routing teachings of Schutte to the routing method of Alkhatib in order to

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provide increased efficiency for address assignment in a network (e.g., see col. 3, line 28 – col. 4, line 11).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

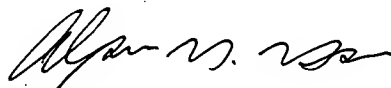
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin M Philpott



ALPUS H. HSU
PRIMARY EXAMINER